IN THE SPECIFICATION

Please replace the paragraph beginning on page 11 at line 10 with the following paragraph:

Figure 3 shows a diagram of a virtual memory translation method in accordance with one embodiment of the present invention. As depicted in Figure 3, a virtual address space 202 of the virtual machine 150 is shown with respect to a virtual address space ~~310~~ 201 provided for use by the virtual machine monitor 140 by the host operating system 120, and the physical address space 300 of the computer system (e.g., computer system 900 of Figure 9).

Please replace the paragraph beginning on page 16 at line 5 with the following paragraph:

Embodiments of the present invention provide hardware support for memory protection in addition to providing hardware support for virtual memory address translation for a virtual machine. In one embodiment, this is accomplished by using the control bits 601 of the various TLB entries (e.g., the "x" entries of the TLB depicted in Figure 4) to convey memory protection information to both a virtual machine application and a host machine application. Thus, for example, in a manner similar to the way the plurality of bits comprising ~~the~~ a CID ~~610~~ describe the context to which ~~the~~ a TLB entry belongs, control bits can be used to describe read or write protections accorded to the TLB entry. In the embodiment depicted in Figure 6, the read/write bit 630 and the dirty bit 620 are used to indicate read and write protections for a given TLB entry. Figure 6 also shows the logic used where write protection is enabled or disabled by the computer system using the read/write bit 630 and a dirty bit 620.

Please replace the paragraph beginning on page 7 at line 13 with the following paragraph:

The host operating system 120 provides execution resources (e.g., memory, device driver support, I/O, and the like) for both the applications 130 and the monitor 140. The host operating system 120 operates with a set of host machine page tables to implement virtual memory. The host

operateings system 120 can provide memory protection between the applications 130 and the monitor 140 and its virtual machine 150 and virtual machine applications 151. In this manner, the data and resources of the components 140-151 are generally handled by the host operating system 120 in the same manner as other applications 130.

Please replace the paragraph beginning on page 1 at line 14 with the

following paragraph:

Many types of digital computer systems are used to implement virtual machines and support for applications that execute within virtual machines. Generally, the term "virtual machine" refers to a computer system image or process that supports multiple computer system images/processes. Each image can contain an operating system and its associated applications, or alternatively, each image may have the same operating system or a different respective operating systems. Some prior art computer systems are specifically built with hardware circuits that support virtual machine capability, however, most prior art computer systems are configured to support virtual machine entirely through software. These prior art solutions are limited in their performance and usefulness due to fact that software support requires very slow software based emulation while the hardware support only implements primitive early generation processor platforms. Thus what is required is a solution that can efficiently implement hardware support for full capability virtual machines and applications executing within virtual machines.